

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
18 April 2002 (18.04.2002)

PCT

(10) International Publication Number
WO 02/030359 A3

(51) International Patent Classification⁷: **A61K 38/18**

(21) International Application Number: **PCT/US01/42719**

(22) International Filing Date: 12 October 2001 (12.10.2001)

(25) Filing Language: **English**

(26) Publication Language: **English**

(30) Priority Data:
60/240,407 13 October 2000 (13.10.2000) **US**

(71) Applicant (*for all designated States except US*): **UNIVERSITY OF CINCINNATI** [US/US]; Room G-7 - Wherry Hall, Mail Location 0829, Cincinnati, OH 45267 (US).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **BRODERICK, Joseph** [US/US]; MSB 4314, University of Cincinnati, P.O. Box 670525, Cincinnati, OH 45267-0525 (US). **CLARK, Joseph** [US/US]; Neurology Vontz 2326, University of Cincinnati, P.O. Box 670525, Cincinnati, OH 45267-0525 (US). **WOO, Daniel** [US/US]; 8355 Miami Road, Cincinnati, OH 45243 (US).

(74) Agents: **KOZLOWSKI, Holly, D. et al.**; Dinsmore & Shohl LLP, 1900 Chemed Center, 255 East Fifth Street, Cincinnati, OH 45202 (US).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report*

(88) Date of publication of the international search report:
18 July 2002

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **METHODS FOR ENHANCING LYSING OF COAGULATED BLOOD WITH APOLIPOPROTEIN E2 PHENOTYPE**

(57) Abstract: Methods for enhancing the lysis of coagulated blood comprise administering to coagulated blood a combination of clot lysis agent and a lysis enhancing amount of apolipoprotein E2 (Apo E2) or a therapeutic derivative thereof. Methods for reducing the risk of blood coagulation comprise administering to blood a combination of a clot lysis agent and a lysis enhancing amount of Apo E2 or a therapeutic derivative thereof. Additional methods for enhancing the lysis of coagulated blood comprise administering to an individual a specific level of clot lysis agent wherein the specific level is based upon the apolipoprotein phenotype of the individual. Further methods for reducing the risks of blood coagulation comprise administering to blood a specific level of a clot lysis agent wherein the specific level is based upon the apolipoprotein phenotype of the individual.



WO 02/030359 A3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US01/42719

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61K 38/18

US CL : 514/2, 21

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 514/2, 21

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Continuation Sheet**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A, E	US 6,313,089 B1 (MATTHEW et al.) 06 November 2001, see entire document.	1-28

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

14 March 2002 (14.03.2002)

Date of mailing of the international search report

25 APR 2002

Name and mailing address of the ISA/US

Commissioner of Patents and Trademarks
Box PCT
Washington, D.C. 20231

Facsimile No. (703)305-3230

Authorized officer

Jean C. Witz

Telephone No. (703) 308-0196

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US01/42719

Continuation of B. FIELDS SEARCHED Item 3:
CAPLUS, BIOSIS, MEDLINE, INPADOC, EAST
search terms: apolipoprotein e2 and (clot? or coagulat?)